

Section 4.2

Farmland

This section discusses farmland in the study area. It provides an update on prime, unique, state-important, and locally important farmland, and discusses newly designated Agricultural Protection Areas. This section also updates the environmental consequences of the proposed build alternatives on farmland. The discussion of environmental consequences takes into consideration development since publication of the June 2000 Final EIS, unrelated development in the study area, revisions in the policy on designating special farmland within municipal boundaries, and the reduction in the right-of-way width associated with all proposed build alternatives.¹

4.2.1 Approach and Methodology

4.2.1.1 Changes since June 2000 Final EIS

To update the affected environment and environmental consequences information associated with farmland in the study area, Sections 3.2 and 4.2 of the Final EIS were reviewed to determine what changes had taken place since publication of the Final EIS. The study area for farmland is described in Section 4.0.1, *Study Area*, of this document.

Updated information on the types of crops and irrigation systems associated with all farmland in the study area was obtained from a map titled *Water-Related Land Use Data Inventory*, from the Utah Department of Natural Resources (UDNR), Division of Water Resources (UDNR) (Utah Department of Natural Resources, Division of Water Resources 2003). Erin Bell of the Natural Resources Conservation Service (NRCS) was contacted in October 2003 for updated information on prime and unique farmland and farmland of state and local importance in the study area. Susan Yoshinaga of the Salt Lake County Assessor's Office and Barry Burton of Davis County were also contacted regarding potential Agricultural Protection Areas in the study area. The data provided by these sources were also verified during review of recent (2003) orthophotographs and limited field surveys.

Farmland impacts were reassessed based on the updated data to determine whether the narrower right-of-way (i.e., 95 m [312 ft] versus 100 m [328 ft]) proposed for all build alternatives (see Chapter 3, *Alternatives*, of this document) would change the acreage or type of farmland impacts disclosed in the Final EIS.

¹ Section 4.13, *Wildlife*, describes impacts on several different wildlife habitat types, including pasture habitat and cropland habitat. Those wildlife habitat types are different from the farmland described in this section in that they are defined differently and described according to a larger wildlife study area. As a result, impacts on pasture and cropland identified in Section 4.13 are different from the farmland impacts disclosed in this section.

4.2.1.2 Changes since Draft Supplemental EIS

Changes have been made to the calculations of impacts on farmlands since the Draft Supplemental EIS was published in December 2004. Those changes were made for the following reasons.

- As stated in Section 4.0, *Introduction*, additional minor modifications have been made to the alignments of Alternatives A and E (Final EIS Preferred Alternative) since preparation of the Draft Supplemental EIS. Where applicable, impact information presented in this section has been updated to reflect those modifications. See Sections 4.2.3.1, *All Farmland (Cropland)*, and 4.2.3.2, *Prime Farmland*.
- Some of the impact assessments were found to be incorrect. These incorrect calculations have been revised. Section 4.2.3.1, *All Farmland (Cropland)*, and Table 4.2-3 include revised calculations for Alternatives B, C, and D.

4.2.2 Affected Environment

This section presents a summary of updated information on the affected environment relative to farmland. The Final EIS described production of irrigated crops in the study area, including alfalfa, corn, and pasture, as well as prime, unique, state-important, and locally important (i.e., farms under the “Century Farm and Ranch” program) farmland. This section provides an update on the area of land currently associated with these farmland categories in the study area, as well as information on Agricultural Protection Areas.

4.2.2.1 Current Agricultural Production

Information on farmland in the Final EIS was obtained from the 1988 version of the UDNR Division of Water Resources map titled *Water-Related Land Use Data Inventory*. Because this version of the map was over 10 years old when the Final EIS was published, other sources were also used in the Final EIS for information on farmland in the study area, including data from field reconnaissance, tax assessor parcel information, and project orthophotographs. Based on these sources, crops in the Final EIS were divided into three categories of irrigated crops: alfalfa, corn, and pasture. The Final EIS did not provide information on non-irrigated croplands.

The 2003 UDNR Division of Water Resources map, which was used to assess agricultural production in the study area for the Supplemental EIS, includes six categories of irrigated crop types—alfalfa, grain, corn, vegetables, grass hay, and pasture-irrigated—and three categories of non-irrigated crop types—pasture-non-irrigated, pasture-sub-irrigated, and farmsteads.

Table 4.2-1 and Figure 4.2-1 present updated information on both irrigated and non-irrigated cropland in the study area.

Table 4.2-1 Area of Irrigated and Non-irrigated Cropland in Study Area

Crop Type	Hectares (Acres) ¹	
	Final EIS	Supplemental EIS
Irrigated Crops²		
Alfalfa	301 (743)	204 (504)
Grain	NA	71 (175)
Corn	194 (479)	32 (78)
Vegetables	NA	1 (2)
Grass hay	NA	92 (228)
Pasture, irrigated	1,091 (2,695)	673 (1,665)
Total	1,586 (3,917)	1,073 (2,652)
Non-Irrigated Crops³		
Pasture, non-irrigated	NA	296 (733)
Pasture, sub-irrigated	NA	224 (554)
Farmsteads	NA	21 (51)
Total	NA	541 (1,338)

Notes:

¹ Conversions are from acres to hectares. Conversions have been rounded.² Cropland in the Final EIS was divided into three crop types (alfalfa, grain, and corn). The additional crop types presented in this table are based on UDNR's Division of Water Resources 2003 map, *Water-Related Land Use Data Inventory*, which further subdivides croplands in the study area.³ The total area of non-irrigated cropland was not disclosed in the Final EIS.

Source: UDNR Division of Water Resources 2003.

4.2.2.2 Prime Farmland

As described in the Final EIS, NRCS classifies certain farmland as prime farmland based on specific physical criteria (e.g., water availability, soil temperature, pH); however, since publication of the Final EIS, NRCS has adopted a new policy that does not allow for designation of prime, unique, or state-important farmland within the boundaries of a municipality (Bell pers. comm., Weber pers. comm.). An updated NRCS CPA 106 form, Farmland Conversion Impact Rating for Corridor Type Projects, is included in Appendix A. As a result of this policy change, some of the farmland identified in the Final EIS as prime and state-important farmland is not included as prime and state-important farmland in this section of the Supplemental EIS.

The acreage of prime farmland outside municipal boundaries was updated through field reconnaissance and consultation with NRCS.

No additional farmland has been designated as prime farmland since publication of the Final EIS. Table 4.2-2 presents updated information on prime farmland in the study area, and Figure 4.2-2 provides location information.

Table 4.2-2 Area of Prime and State-Important Farmland

Farmland Designation	Hectares (Acres)*	
	Final EIS	Supplemental EIS
Prime	359 (888)	166 (409)
State-Important	25 (62)	7 (17)

Note:

* Conversions are from acres to hectares. Conversions have been rounded.

Sources: Bell pers. comm., Federal Highway Administration et al. 2000.

4.2.2.3 Unique Farmland

As described in the Final EIS, no unique farmland is located in the study area (Bell pers. comm.).

4.2.2.4 Farmland of State Importance

As stated in the Final EIS, farmland of state importance is classified by NRCS based on certain physical criteria similar to those required for designating prime farmland. The acreage of farmland of state importance in the study area has decreased since publication of the Final EIS because of development and the new NRCS policy described above. Table 4.2-2 above presents updated information on farmland of state importance in the study area, and Figure 4.2-2 provides location information.

4.2.2.5 Farmland of Local Importance

As described in the Final EIS, Utah initiated a “Century Farm and Ranch” program in 1996 that allowed for recognition of farms that have been operated continuously by the same family for at least 100 years. One farm in the study area has Century Farm status, and several other farms represent multigenerational farming operations (see Section 3.2.5 of the Final EIS). The status of these properties has not changed since publication of the Final EIS. Figure 4.2-2 illustrates the location of these properties in the study area.

4.2.2.6 Agricultural Protection Areas

Since publication of the Final EIS, the Utah Legislature has enacted a new law—Utah Code Title 17 (Counties), Chapter 41 (Agricultural Protection Area)—to better protect certain agricultural areas. The law requires each county in Utah to create an Agriculture Protection Area Advisory Board to evaluate proposals for Agriculture Protection Areas. Owners of land in agricultural production (crops or livestock) can petition their local municipality for an Agriculture Protection Area designation. Agriculture Protection Areas are protected from state and local laws that restrict farm practices unless the regulations are required for public safety or are required by federal law. Agriculture Protection Areas also cannot be condemned for highway purposes unless there is no reasonable and prudent alternative for the project.

Based on consultation with representatives from Davis and Salt Lake Counties, there are no designated Agricultural Protection Areas in the study area (Burton pers. comm. [a], Yoshinaga pers. comm.).

4.2.3 Environmental Consequences and Mitigation Measures

As described in the Final EIS, all proposed build alternatives would have an impact on farmland in the study area. Since publication of the Final EIS, development unrelated to the proposed action has affected farmland in the study area. In addition, because of a new NRCS policy, farmland within municipal boundaries is no longer designated as prime, unique, or state-important farmland (see Section 4.2.2.2 above). As a result, the acreage of farmland in the study area has decreased.

The updated environmental consequences and mitigation measures associated with farmland are summarized below.

4.2.3.1 All Farmland (Cropland)

No-Build Alternative

Existing Conditions (2004)

Under the existing conditions (2004) No-Build Alternative, no farmland would be affected by the proposed action.

Future Conditions (2020)

If none of the build alternatives is implemented, development in the study area will likely continue at its current rate. Based on the number of building permits issued in Davis County since 1999, between approximately 240 ha (600 ac) and 320 ha (800 ac) of land are being developed per year in Davis County (Sommerkorn pers. comm.[a]). Because a large portion of the undeveloped land in the study area is farmland, it is likely that farmland will be converted at a similar rate in the future. The exact nature and timing of the future conversion of farmland are not known at this time.

Build Alternatives

As described in the Final EIS, all the proposed build alternatives would directly and indirectly affect farmland in the study area. Direct impacts would occur on farmland in the right-of-way of a build alternative; indirect impacts would occur if the right-of-way created farmland parcels smaller than 2 ha (5 ac) and not contiguous with other farmland, or if the right-of-way resulted in farmland that is no longer accessible.

Table 4.2-3 and Figure 4.2-3 provide updated information relative to impacts of the proposed build alternatives on farmland. Farmland impacts associated with all the proposed build alternatives, except Alternative A, have decreased from those presented in the Final EIS because of unrelated development activities in the study area and the proposed narrower right-of-way associated with the build alternatives. The increase in farmland impacts under Alternative A relative to the Final EIS is attributable to the revised methodology used for the Supplemental EIS to determine the acreage of farmland in the study area (see Section 4.2.2.1, *Current Agricultural Production*). Specifically, the 2003 UDNR Division of Water Resources map, which was used to calculate the farmland in the study area for the Supplemental EIS, shows an area of farmland near 400 South west of Redwood Road that was not shown as farmland in the Final EIS. Alternative A would affect some of the farmland in that area.

Mitigation Measures

As described in the Final EIS, owners of farmland within the proposed right-of-way of a build alternative (i.e., farmland subject to direct impacts) would be compensated according to the requirements of Uniform Relocation Assistance and Real Property Acquisition Policies Act (URAA), as amended, and other state and federal guidelines. For indirect impacts, UDOT would determine, based on cost comparison, whether to restore access to the parcel or purchase the remainder of the farmland.

Table 4.2-3 Impacts on Farmland

Crop	Hectares (Acres) Affected by Alternative ¹					
	No-Build Alternative	Alternative A ²	Alternative B	Alternative C	Alternative D	Alternative E
Direct Impacts						
<i>Irrigated Crops</i>						
Alfalfa	0 (0)	2 (4)	27 (66)	3 (7)	3 (7)	3 (7)
Grain	0 (0)	0 (0)	17 (43)	0 (0)	0 (0)	0 (0)
Corn	0 (0)	0 (0)	5 (12)	0 (0)	0 (0)	0 (0)
Vegetables	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Grass Hay	0 (0)	4 (9)	6 (14)	3 (8)	3 (8)	4 (9)
Pasture, irrigated	0 (0)	80 (197)	81 (201)	58 (143)	57 (140)	57 (140)
<i>Non-Irrigated Crops</i>						
Pasture, non-irrigated	0 (0)	4 (10)	14 (34)	7 (18)	8 (21)	8 (20)
Pasture, sub-irrigated	0 (0)	36 (897)	51 (127)	24 (60)	43 (105)	44 (109)
Farmsteads	0 (0)	1 (3)	4 (90)	2 (4)	3 (7)	3 (7)
Total Direct Impacts	0 (0)	127(312)	205(506)	97 (240)	117 (288)	119 (292)
Indirect Impacts³						
Total Indirect Impacts	0 (0)	17 (43)	3 (7)	4 (10)	7 (17)	6 (16)
TOTAL IMPACTS (Direct & Indirect)	0 (0)	144 (355)	208 (513)	101 (250)	124 (305)	125 (308)
TOTAL IMPACTS FROM FINAL EIS (Direct & Indirect) ⁴	0 (0)	133 (328)	286 (706)	146 (362)	136 (337)	NA

Notes:

¹ Conversions are from acres to hectares. Conversions may vary because of rounding.

² The increase in farmland impacts under Alternative A, relative to the Final EIS, is attributable to the revised methodology used for the Supplemental EIS to determine the acreage of farmland in the study area.

³ Indirect impacts would occur if the right-of-way created farmland parcels smaller than 2 ha (5 ac) and not contiguous with other farmland, or if the right-of-way resulted in farmland that is no longer accessible.

⁴ Impact measurements taken from Table 4-2 in the Final EIS. Impacts representative of direct and indirect impacts within the 100-m (328-ft) right-of-way.

Source: UDNR Division of Water Resources 2003.

4.2.3.2 Prime Farmland

No-Build Alternative

Existing Conditions (2004)

Under the existing conditions No-Build Alternative, there would be no project-related impacts on prime farmland.

Future Conditions (2020)

If none of the build alternatives is implemented, development in the study area will likely continue at its current rate. It is possible that these future projects would encroach on prime farmland in the study area, although the nature and timing of these projects are not known at this time.

Build Alternatives

As described in the Final EIS, all the proposed build alternatives would have direct impacts on prime farmland in the study area. Farmland impacts associated with all proposed build alternatives have decreased from those presented in the Final EIS as a result of unrelated development activities; the new NRCS policy of not designating prime, unique, and state-important farmland within municipal boundaries; and the proposed narrower right-of-way associated with the build alternatives. Table 4.2-4 and Figure 4.2-4 provide updated impact information relative to prime farmland in the study area.

Table 4.2-4 Impacts on Prime and State-Important Farmland

Designation	Hectares (Acres) Affected by Alternative*					
	No-Build Alternative	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
Prime Farmland						
Final EIS	0 (0)	34 (84)	72 (178)	36 (90)	26 (64)	NA
Supplemental EIS	0 (0)	9 (23)	36 (88)	11 (28)	13 (31)	11 (27)
Farmland of State Importance						
Final EIS	0 (0)	3 (7)	2 (5)	3 (7)	0(0)	NA
Supplemental EIS	0 (0)	0 (0)	1 (2)	0 (0)	0(0)	0 (0)

Note:

* Conversions are from acres to hectares. Conversions have been rounded.

Source: Bell pers. comm.

Mitigation Measures

The mitigation measures for prime farmland are the same as those described above in Section 4.2.3.1 for all farmland.

4.2.3.3 Unique Farmland

There is no unique farmland located in the study area. Therefore, unique farmland would not be affected by the No-Build Alternative (existing or future conditions) or the proposed build alternatives.

4.2.3.4 Farmland of State Importance

No-Build Alternative

Existing Conditions (2004)

Under the existing conditions No-Build Alternative, there would be no project-related impacts on farmland of state importance.

Future Conditions (2020)

If none of the build alternatives is implemented, development in the study area will likely continue at its current rate. It is possible that these future projects would encroach on farmland of state importance in the study area, although the nature and timing of these projects are not known at this time.

Build Alternatives

The Final EIS stated that all the proposed build alternatives would have direct impacts on farmland of state importance. However, impacts on farmland would decrease from those shown in the Final EIS such that only Alternative B would impact farmland of state importance. This decrease is due to unrelated development activities in the study area; the new NRCS policy of not designating prime, unique, and statewide important farmland within municipal boundaries; and the proposed narrower right-of-way associated with the build alternatives. Table 4.2-4 and Figure 4.2-4 above provide updated impact information relative to farmland of state importance in the study area.

Mitigation Measures

Only Alternative B would impact state-important farmland. If Alternative B were chosen as the proposed build alternative, the mitigation measures identified in Section 4.2.3.1 for all farmland would be adopted to mitigate adverse impacts on farmland of state importance.

4.2.3.5 Farmland of Local Importance

No-Build Alternative

Existing Conditions (2004)

Under the existing conditions No-Build Alternative, there would be no project-related impacts on other farmland of local importance.

Future Conditions (2020)

If none of the build alternatives is implemented, development in the study area will likely continue at its current rate. It is possible that these future projects would encroach on designated Century Farm or multigenerational farms in the study area, although the nature and timing of these projects are not known at this time.

Build Alternatives

As stated in the Final EIS, all the proposed alternatives would affect the designated Century Farm in the study area, although none would alter the farm's operation or its Century Farm designation. Alternative B would also affect the two multigenerational farms in the study area. These impacts have not changed since publication of the Final EIS (see Section 4.2.5 of the Final EIS). Impacts associated with Alternative E would be identical to those disclosed for Alternative D in the Final EIS.

Mitigation Measures

The mitigation measures for locally important farmland would be the same as those described above for all farmland.

4.2.3.6 Agricultural Protection Areas

There are no Agricultural Protection Areas in the study area. Therefore, none would be affected by the No-Build Alternative or the proposed build alternatives.